

INTERNATIONAL SEARCH REPORT

ational Application No.
/IN2004/000009

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C01B33/40 C01B33/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 846 660 A (AMCOL INTERNATIONAL CORP) 10 June 1998 (1998-06-10)	1-5, 8, 9, 11, 12, 14-23, 26, 27, 29, 30, 32-42
A	page 5, lines 10-25 page 5, line 40 - page 6, line 19 page 8, lines 3-10, 22-31 page 9, line 51 - page 17, line 2 ----- -/--	6, 7, 10, 13, 24, 25, 31

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

6 September 2004

Date of mailing of the international search report

16/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Werner, H

INTERNATIONAL SEARCH REPORT

national Application No

T/IN2004/000009

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PARK J H ET AL: "The relationship between nano- and micro-structures and mechanical properties in PMMA-epoxy-nanoclay composites" POLYMER, ELSEVIER SCIENCE PUBLISHERS B.V, GB, vol. 44, no. 7, March 2003 (2003-03), pages 2091-2100, XP004412485 ISSN: 0032-3861	1-3,11, 17-21; 29,35-42
A	page 2093 - page 2095	4-10, 12-16, 22-28, 30-34
X	----- EP 0 747 451 A (AMCOL INTERNATIONAL CORP) 11 December 1996 (1996-12-11)	1-4,9, 11,12, 16-22, 27,29, 30,34, 37-42
A	page 13, line 26 - page 14, line 4; claims 1,5,14,20,24; example 1	5-8,10, 13-15, 23-26, 28, 31-33, 35,36
X	----- EP 0 909 787 A (AMCOL INTERNATIONAL CORP) 21 April 1999 (1999-04-21)	1-3,11, 12, 16-21, 29,30, 34-42
A	paragraphs '0002!, '0006!, '0008!, '0074!	4-10, 13-15, 22-28, 31-33

INTERNATIONAL SEARCH REPORT

national Application No

T/IN2004/000009

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0846660	A	10-06-1998	US 5952095 A	14-09-1999
			CA 2218303 A1	06-06-1998
			CA 2218356 A1	06-06-1998
			CA 2223350 A1	06-06-1998
			EP 0846660 A2	10-06-1998
			EP 0846661 A2	10-06-1998
			EP 0846662 A2	10-06-1998
			JP 10194727 A	28-07-1998
			JP 10273314 A	13-10-1998
			US 6251980 B1	26-06-2001
			US 6242500 B1	05-06-2001
			US 6057396 A	02-05-2000
			US 6124365 A	26-09-2000
EP 0747451	A	11-12-1996	US 5698624 A	16-12-1997
			US 5552469 A	03-09-1996
			US 5721306 A	24-02-1998
			US 5760121 A	02-06-1998
			CA 2178441 A1	08-12-1996
			EP 0747451 A2	11-12-1996
			JP 9118518 A	06-05-1997
			US 5998528 A	07-12-1999
			US 6228903 B1	08-05-2001
			US 5837763 A	17-11-1998
			US 5844032 A	01-12-1998
			US 5849830 A	15-12-1998
			US 5877248 A	02-03-1999
EP 0909787	A	21-04-1999	US 5849830 A	15-12-1998
			CA 2247607 A1	15-04-1999
			EP 0909787 A1	21-04-1999
			JP 11193350 A	21-07-1999